

## ABSTRACT

An apparatus for the desalination or purification of water comprises a non-solid vessel 3 having a bottom defining an opening, the vessel 3 capable of being partially submerged below the surface 13 of a body of water, a pan 5 located within the vessel 3, the pan 5 being flexibly connected to the inner wall 19 of the vessel 3 and being located beneath the surface 13 of the water, a lens 1 fixably connected to the top of the vessel 3, wherein the lens 1 is focused beneath the surface 13 of the water and above the surface of the pan 5 means for varying the orientation of the vessel 3 in accordance with the location of the sun, and means for condensing steam generated in the non-solid vessel 3, whereby steam generated in the non-solid vessel 3 is condensed outside of the non-solid vessel 3. A method for the desalination or purification of water comprises the steps of containing a body of water within a vessel 3, the vessel 3 having a lens 1 fixably attached at the top and bottom defining an opening, located a pan 5 just below the surface 13 of the water, focusing the lens 1 just beneath the surface 13 of the water and just above the bottom surface of the pan 5, condensing water vapor, re-filling the vessel 3 with water as the water is converted to steam, and periodically re-orienting the vessel 3 in a manner that tracks movement of the sun.